

ABSTRACT OF THE DISCLOSURE

An interconnect circuit transmits data signals from a first terminal to a second terminal through a data line having a plurality of data driving circuits capable of temporarily interrupting or reestablishing data transmission in a portion of the data line responsive to congestion signals which propagate along a congestion line in a direction opposite the direction of data signal transmission. The congestion signals may be indicative of the status of the second terminal, where a first congestion signal may indicate the second terminal is not receiving data and a second congestion signal may indicate the second terminal is receiving data. Different types of data driving circuits may be cascade-connected in an alternating fashion and may be adapted to interrupt or to reestablish data transmission in sequence starting from the data driving circuit nearest the second terminal of the interconnect and continuing in the direction of the first terminal. The speed with which the first congestion signal and the speed with which the second congestion signal propagate along the congestion line may or may not be equal.